

4/06

u. 26

DART AEROSPACE LTD		Work Order:	20296
Description: Mounting Lug/Nut Plate Kit		Part Number:	K10017
Dwg: D3175 Rev. A; D3178 Rev. A		Qty:	64
			Page 1 of 2

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveller Note: K10017 Kits to be made in multiples of 4. (1) K10017 Kit consists of (2) D3175-041 and (2) D3178-041.	HF	04.01.26	6
2	MV	Cut blanks: 3.00" x 1.520" Material: 5052-H32/H34 sheet (QQ-A-250/8) 0.063" thick (M5052H32S.063) (Cut 1 stack of 8 per (4) K10017) Identify as D3178-1 Batch: M12924	SL	04/01/07	3
3	MV	Cut blanks: 2.5" x 1.5" x 2.2" (grain along 2.2") Material: 6061-T6 Bar (QQ-A-200/8 or QQ-A-250/11) (M6061T6B1.500x02.500) (Cut 16 blanks per (4) K10017) Identify as D3175-1 Batch: M10971 (Note: (2) D3175-1 are required per D3175-041 assembly)	SL	04/01/07	16
4	MV	Cut blanks: 2.125" x 1.250" Material: 6061-T6 Bar (QQ-A-200/8 or QQ-A-250/11) 0.375" thick (M6061T6B0.375x01.250) (Cut 8 blanks per (4) K10017) Identify as D3175-3 Batch: M7321	SL	04/01/07	8
5	MV	Machine D3178-1 as per Folio FA296 and Dwg D3178	SL	04/01/07	3
6	QC2	Inspect parts as they come off the CNC machine	SL	04/01/07	3
7	QC8	Second inspection	SL	04/01/07	3
8	MV	Machine D3175-1 as per Folio FA293 and Dwg D3175	SL	04/01/07	3
9	QC2	Inspect parts as they come off the CNC machine	SL	04/01/07	3
10	MV	Deburr and Tumble	SL	04/01/07	3
11	QC8	Second inspection	SL	04/01/07	3
12	MV	Machine D3175-3 as per Folio FA294 and Dwg D3175	SL	04/01/07	3
13	QC2	Inspect parts as they come off the CNC machine	SL	04/01/07	3
14	MV	Deburr and Tumble	SL	04/01/07	3
15	QC8	Second inspection	SL	04/01/07	3
16	GA	C'sink D3178-1 holes as per Dwg D3178	SB	04/01/10	3
17	GA	Deburr stack of D3178-1	SB	04/01/10	3
18	QC5	Inspect C'sink	SB	04/01/10	3
19	FP	Chemical Conversion Coat D3178-1, D3175-1 & D3175-3 per QSI 005 4.1	SB	04/01/10	3

BB BY 04-2-13

Work Order:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Manuf / Design Mgr	Approval QC Inspector

NCR		WORK ORDER NON-CONFORMANCE						
DATE	STEP	Description of NC section A	Corrective Action Section B		Sign & Date	Verification Section C	Approval Design Mgr	Approval QC Inspector
04-02-12 B20292	1/A	Not enough D3173-1 beams were made. There were supposed to be 4 and there are only 3	Initial	Assemble the 3 beams store extra 2 D3173-011 1 K10017 bit 2 D3173-011 in Stores	04-02-12	04-02-12	N/A	04-02-12

PAR#: _____

Fault Category: _____

DQA: _____

Date: _____

DART AEROSPACE LTD	Work Order:	20296
Description: Mounting Lug/Nut Plate Kit	Part Number:	K10017
Dwg: D3175 Rev. A; D3178 Rev. A	Qty:	8

Page 2 of 2

Step	Location	Procedure	By	Date	Qty
20	QC3	Inspect Conversion Coat		AB	04.02.10 8
21	GA	Assemble D3178-041 as per Dwg D3178 Pick: Qty Part Number Description Batch 16 MS20426AD3-4 Rivet M19748 8 MS21059L3 Nut Plate M12240		SB	04/02/10 8
		Identify as D3178-041			
22	QC5	Inspect D3178-041 Assembly		AB	04.02.10 8
23	GA	Assemble D3175-041 as per Dwg D3175 Pick: Qty Part Number Description Batch 4 AN3-7A Bolt M5288 8 AN960JD10L Washer M13441 4 MS21042L3 Nut (or -3) M19019		SB	04/02/10 8
		Identify as D3175-041			
24	QC5	Inspect D3175-041 Assembly		AB	04.02.10 8
25	FP	Powder Coat D3175-041 Only Gloss White (Ref: 4.3.5.1) per QSI 005 4.3		MM	04.02.10 8
26	QC3	Inspect Powder Coat		AB	04.02.10 8
27	PK	Identify and Stock as K10017. Note: (1) Kit consists of (2) D3175-041 and (2) D3178-041. Part Number Description Qty D3175-041 Mounting Lug B D3178-041 Nut Plate B		AB	04.02.10 4
28	AC	Parts to stock and Prorate cost to parts per Step 27. Cost / part 76.14		SB	04.02.10 4
29	DC	Close W/O 76.14 Inspect Level 21		KJ	04.02.17 4

Rev	Date	Change	Revised By	Approved
A	03.01.28	New issue	KJ/RF	
B	03.02.28	Modify Step 1,2,3,4,21,23	KJ/RF	

RELEASED
03.02.04 RF

Work Order:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Manuf / Design Mgr	Approval QC Inspector

NCR		WORK ORDER NON-CONFORMANCE							
DATE	STEP	Description of NC section A	Corrective Action Section B			Sign & Date	Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial						

PAR#: _____ Fault Category: _____ DQA: _____ Date: _____

NOTE: Date & initial all entries
H:\Admin-QA\ISO\forms\w\oncB.doc

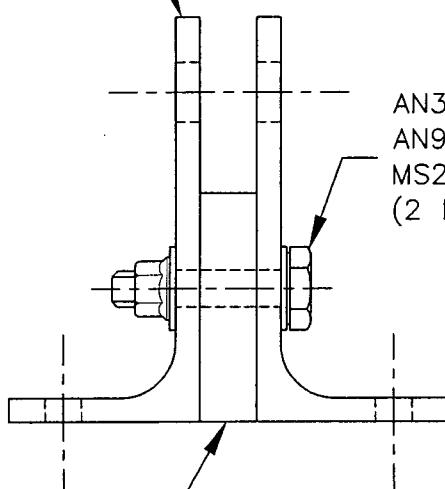
QA: N/C Closed: _____ Date: _____



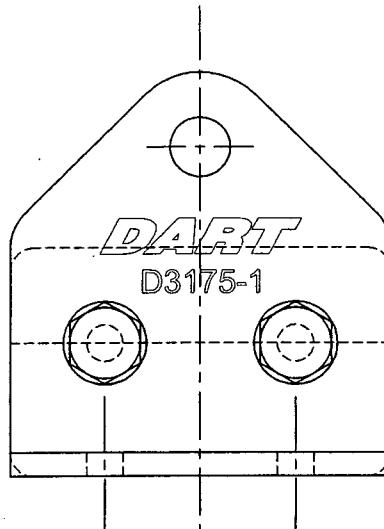
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ISSUED

DESIGN	DRAWN BY	DART AEROSPACE LTD	
CHECKED	APPROVED	D3175	REV. A
			SHEET 1 OF 2
DATE	TITLE	SCALE	
02.12.03	Mounting Lug	1:1	
A	02.12.03	NEW ISSUE	

D3175-1
(2 PLACES)



AN3-7A BOLT (1)
AN960JD10L WASHER (2)
MS21042L3 NUT (1)
(2 PLACES)



D3175-3

D3175-041 MOUNTING LUG

FINISH: POWDER COAT ASSEMBLY WHITE (4.3.5.1)
PER DART QSI 005 4.3

SHOP COPY

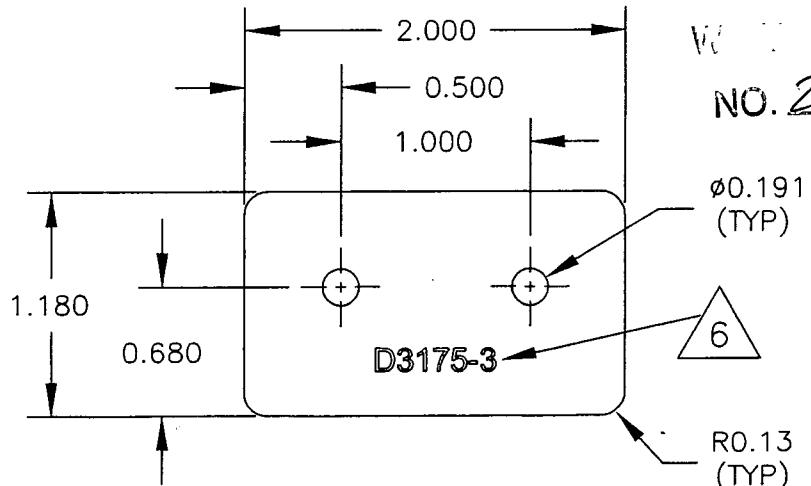
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ENGINEERING

UNCONTROLLED COPY

SUBJECT: D3175-041 MOUNTING LUG

W/

NO. 20296



D3175-3 SPACER

- 1) MATERIAL: 6061-T6 ALUMINUM, 0.285 TO 0.290 THICK
(QQ-A-200/8 OR QQ-A-250/11 OR QQ-A-225/8)
(REF DART SPEC. M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) ENGRAVE P/N IN THIS AREA AS SHOWN TO A DEPTH OF 0.010 MAX

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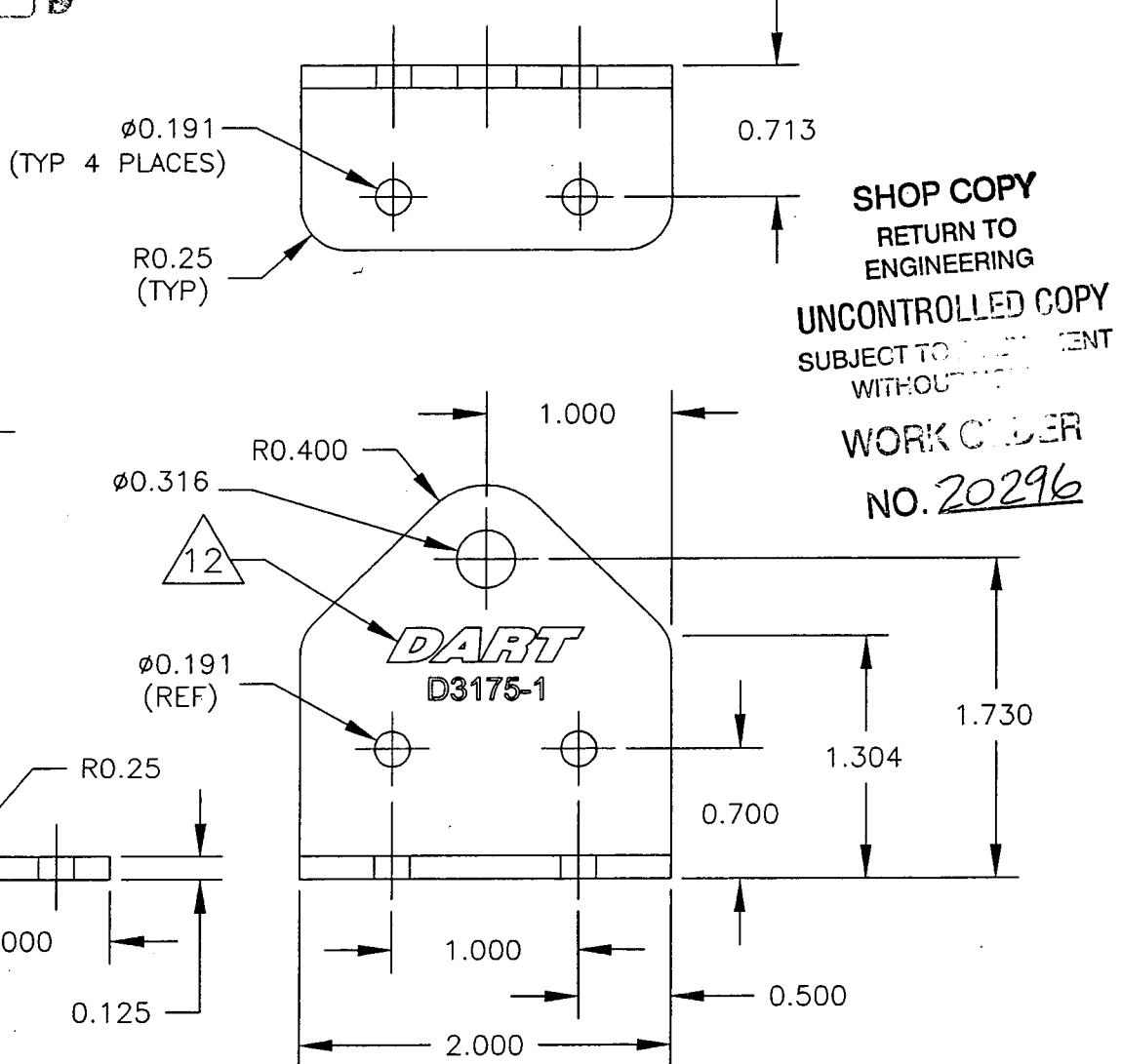
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3175
DATE 02.12.03		TITLE MOUNTING LUG

REV. A

SHEET 2 OF 2

SCALE

1:1

RELEASED
02.12.03**D3175-1 BRACKET**

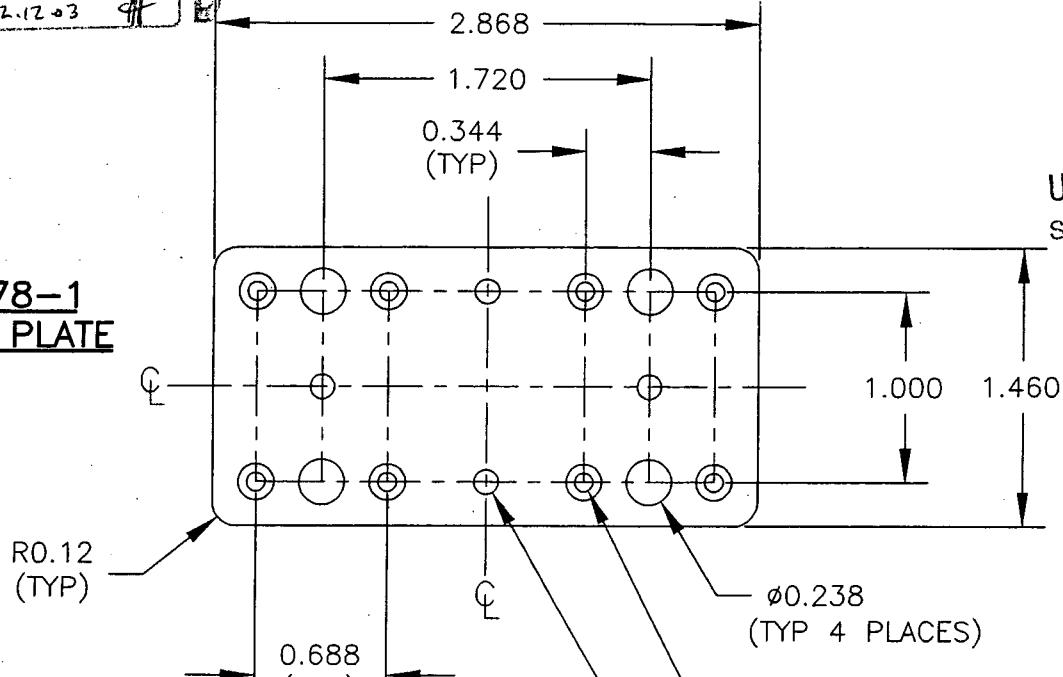
- 7) MATERIAL: 6061-T6 ALUMINUM (QQ-A-200/8 OR QQ-A-250/11 OR QQ-A-225/8)
(REF DART SPEC. M6061T6B)
- 8) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 9) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 10) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 11) ALL DIMENSIONS ARE IN INCHES
- 12) ENGRAVE DART LOGO & P/N IN THIS AREA AS SHOWN TO A DEPTH OF 0.010 MAX



DESIGN	4P	DRAWN BY	4P	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	4P	APPROVED	4P	DRAWING NO. D3178
DATE	02.12.03			REV. A SHEET 1 OF 1
				SCALE 1:1

RELEASED
02.12.03

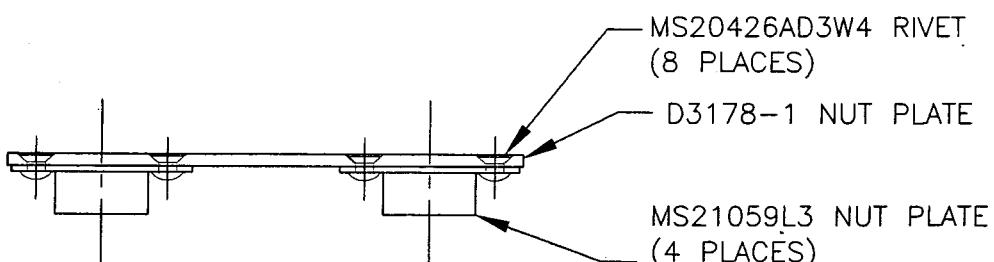
D3178-1
NUT PLATE



DRILL #40 ($\phi 0.098$)
C'SINK $\phi 0.189 \times 100^\circ$
(TYP 8 PLACES)

DRILL #30 ($\phi 0.129$)
(TYP 4 PLACES)

D3178-041
NUT PLATE



NOTES, D3178-1 NUT PLATE:

- 1) PART IS SYMMETRIC ABOUT CENTERLINES
- 2) MATERIAL: 5052-H32/H34 SHEET 0.063 THICK (QQ-A-250/8)
(REF DART SPEC. M5052H32S.063)
- 3) BREAK ALL SHARP EDGES 0.005-0.010
- 4) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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WORK ORDER
NO. 20296

Job Costing Report

Dart Aerospace Ltd.
HawkesburyJan 26, 2004
10:40 am

Work Order No : 0020296
 Project Name : *K10017
 Project For : WK406
 Work Order Type : Main
 Main WO Number :
 House Part Number : *K10017
 Description : Mtg Lug/Nut Plate Kit
 Manufactured : Yes
 Amount Req'd : 6
 Amount Done : 0
 Start Date : 01-26-04
 Est Finish Date : 02-04-04
 Act Finish Date :
 Drawings Reqd : No
 Ok for Approval :
 Approval Rec'd :
 Department Code:
 Burden Flags : NNNNNNN
 WO Status : Open
 Invoice State : Not Invoiced
 Invoice Date :
 Invoice Number :
 Invoice Amount : 0.00
 Order Entry No :
 OE Value : 0.00
 Est Margin : 0.000%
 Actual Margin : 0.000%
 \$0 Posted to Finished Goods

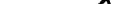
	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
=====		=====	=====		
Burden :	0.00	0.00	0.00		
=====		=====	=====		
Total Cost :	0.00	0.00	0.00		
Margin :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/ (Loss) :	0.00	0.00

DART AEROSPACE LTD	Work Order: 202596
Description: Nut plate	Part Number: 13178-1
Inspection Dwg:	Rev: A

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Measured by:		Audited by:		Prototype Approval:	
Date:		Date:		Date:	

Rev	Date	Change	Revised by	Approved
A	8/1/2010	New Issue	KJ/RF	

DART AEROSPACE LTD	Work Order: D31753	
Description: L49	Part Number:	
Inspection Dwg:	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Measured by:		Audited by:		Prototype Approval:	
Date:	09/02/08	Date:	04/02/08	Date:	

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/RF	

DART AEROSPACE LTD	Work Order: <u>A31551</u>
Description: <u>L19</u>	Part Number: <u>R20296</u>
Inspection Dwg:	Rev: <u>A</u>

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Measured by:	<i>SL</i>	Audited by:	<i>ML</i>	Prototype Approval:	<i>N/A</i>
Date:	<i>09/12/08</i>	Date:	<i>09/12/08</i>	Date:	

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/RF	